

CLAIMS

1. Use of a pharmaceutical composition comprising ~~at least one~~
5 ~~phosphorylcholine conjugate, or~~ an antibody preparation, for example a
monoclonal antibody, with specificity to a phosphorylcholine conjugate, in
the manufacture of a medicament for immunization and treatment of
~~mammals, including humans,~~ against atherosclerosis or an atherosclerotic
related disease.
- 10 2. A method for immunization and treatment of a ~~mammal, including a~~
human, against atherosclerosis or an atherosclerotic related disease, the
method comprising the step of administering to the ~~mammal~~ ^{human} a
pharmaceutical composition comprising ~~at least one phosphorylcholine~~
~~conjugate, or~~ an antibody preparation, for example a monoclonal antibody,
15 with specificity to a phosphorylcholine conjugate
3. The use of claim 1 or method of claim 2 wherein the medicament is for
administration by injection or wherein the composition is administered by
injection.
4. The use or method of any one of the preceding claims wherein the
20 phosphorylcholine is linked to a carrier via a spacer.
5. The use or method according to claim 4, wherein the carrier is a protein.
6. The use or method according to claim 5, wherein the protein is KLH
(keyhole limpet hemocyanin) or human serum albumin (HSA).
7. The use or method according to claim 4 wherein the carrier is latex beads.
- 25 ~~8. The use of one or more of the phosphorylcholine conjugates as defined in~~
any one of the preceding claims in the manufacture of a pharmaceutical
composition, optionally in combination with an adjuvant, for
~~immunotherapy or therapy for the treatment of ischemic cardiovascular~~
~~diseases.~~
- 30 ~~8/8.~~ A method of prophylactic or therapeutic treatment of a ~~mammal, for~~
~~example a human being,~~ suffering from atherosclerosis or facing the risk of
developing ischemic cardiovascular disease, whereby a therapeutically
effective amount of ~~at least one phosphorylcholine conjugate or an~~

32

antibody preparation, for example a monoclonal antibody, with specificity to a phosphorylcholine conjugate is administered.

5 10. Method of diagnosing the presence or absence of IgM or IgG antibodies related to increased or decreased risk of developing ischemic cardiovascular diseases, using a phosphorylcholine conjugate.

14. ^{Use} Method according to ^{any one of 9 to 13} claim 10 wherein phosphorylcholine is linked to a carrier via a spacer.

15. ^{Use} Method according to claim 11 wherein the carrier is a protein.

10 16. ^{Use} Method according to claim 12 wherein the protein is KLH (keyhole limpet hemocyanin) or human serum albumin (HSA).

17. ^{Use} Method according to claim 11, wherein the carrier is latex beads.

18. ^{Use} Method according to any one of claims ^{9 to 17} 10-17, wherein the assay is an immunoassay.

15 9. Use of a phosphorylcholine conjugate in a method for assessing a human patient's risk of developing or progression of ischemic cardiovascular disease in which the patient's levels of IgM or IgG antibodies reactive with the phosphorylcholine conjugate are assessed, wherein low levels of antibody reactive with the phosphorylcholine conjugate are predictive of the occurrence of cardiovascular disease in a healthy human patient.

20 10. The use of Claim 9 wherein the cardiovascular disease is ischemic cardiovascular disease.

11. The use of Claim 9 wherein the cardiovascular disease is atherosclerosis.

12. The use of any one of Claims 9 to 11 wherein the patient's levels of IgM antibodies reactive with the phosphorylcholine conjugate are assessed.

13. The use of any one of Claims 9 to 11 wherein the patient's levels of IgG antibodies reactive with the phosphorylcholine conjugate are assessed.